## PATENT COOPERATION TREATY

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	OITA	NAL SEARCHIN	NG AUTHOR	ITY		SLAS			
To:						PCT "YZOA			
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					WRITTEN OPINION OF THE				
					INTERNATIONAL SEARCHING AUTHORITY				
						(PCT Rule 43bis.1)			
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					Date of mailing				
					(day/month/year)				
1		gent's file referen 40221P	ce		FOR FURTHER ACTION  See paragraph 2 below				
		plication No.		International filing date	(day/month/year)	Priority date (day/month/year)			
l	PCT/JP2005/006754 06.04								
Internat	ional Pa	tent Classification	n (IPC) or both	national classification a	nd IPC				
Applica	int :KIN	INDUSTR	TES. LT	rD.					
	m:		3::	ting to the following item					
1.	I has c	•		ting to the following item	15.				
		Box No. I	Basis of the	opinion					
	片	Box No. II	Priority			ar a state of the			
	님	Box No. III			egard to novelty, inver	ntive step and industrial applicability			
		Box No. IV		y of invention	s 1(a)(i) with segard to	o novelty, inventive step or industrial			
		Box No. V	applicability	r; citations and explanation	ons supporting such st	atement			
		Box No. VI	Certain doc	uments cited					
		Box No. VII	Certain defe	ects in the international ap	plication				
		Box No. VIII	Certain obse	ervations on the internation	onal application				
,	ימווים	THED ACTION							
2.	2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.								
	If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Forn PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.								
		arther options, see							
3.	For fu	rther details, see	notes to Form	PCT/ISA/220.					
Name a	and mail	ing address of the	ISA/JP		Authorized officer				
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Facsimile No.					Telephone No.				

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/006754

Box	No. I Basis of this opinion
1.	With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
	This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under
	Rule 12.3 and 23.1(b)).
2.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
	a. type of material
	a sequence listing
	table(s) related to the sequence listing
	b. format of material
	in written format
	in computer readable form
	c. time of filing/furnishing
	contained in the international application as filed.
	filed together with the international application in computer readable form.
	furnished subsequently to this Authority for the purposes of search.
3.	In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Additional comments:
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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/006754

Box	No. V Reasoned stateme citations and expl	ent under Ru anations sur	le 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; poorting such statement	
1.	Statement			
	Novelty (N)	Claims	1-20	YES
		Claims		NO
	Inventive step (IS)		8-10, 18-20	YES
		Claims	1-7, 11-17	NO
·	Industrial applicability (IA)	Claims	1-20	YES
		Claims		NO
1				

## 2. Citations and explanations:

Document 1: Microfilm of the specification and drawings first annexed to the written application of Japanese Utility Model Application Nr. 56838/1987 (Laid-open No. 164689/1988) (Daikin Industries, Ltd.), 26 October, 1988 (26.10.88), Full text, Figures 1-4

Document 2: Microfilm of the specification and drawings first annexed to the written application of Japanese Utility Model Application Nr. 128406/1988 (Laid-open No. 48694/1990) (Showa Electric Wire & Cable Co., Ltd.), 4 April, 1990 (04.04.90), Full text, Figures 1-4

Document 3: CD-ROM of the specification and drawings annexed to the written application of Japanese Utility Model Application Nr. 30952/1992 (Laid-open No. 90078/1993), (Mitsubishi Motors Corp.), 7 December, 1993 (07.12.93), [0009] – [0012], Figure 1

Document 4: JP, 49-41543, Y1 (Sanyo Electric Co., Ltd.), 14 November, 1974 (14.11.74), Full text, Figure 2

The inventions of claims 1, 2, 5, 11, 12 and 15 do not appear to involve an inventive step in view of document 1 and document 2 cited in the ISR. An invention providing a tapered section on a male screw is described in document 2, and applying this to the joint of document 1 is easy for a person skilled in the art. And document 1 describes the point of threading together a male screw and a female screw while being inserted into the tube, and document 2 describes also the invention of giving the tapered section a convex spheroidal surface.

The invention of claims 3 and 13 do not appear to involve an inventive step in view of documents 1-3 cited in the ISR. Document 3 describes an invention where the tapering angle of the male side is made smaller than the tapering angle of the female side, and combining documents 1-3 is easy for a person skilled in the art.

The inventions of claims 4, 6, 7, 14, 16 and 17 do not appear to involve an inventive step in view of documents 1-4 cited in the ISR. Document 4 describes an invention where a protrusion and an O-ring are provided on the tapered section of the male side, and combining documents 1-4 is easy for a person skilled in the art.